Saguaro National Park Arizona





# **Preliminary Alternatives**

Dear Friends:

As most of you know, we have been working on a general management plan (GMP) for Saguaro National Park. This plan will establish the park's management direction for the next 15 to 20 years. The GMP team appreciated hearing and reading your thoughts, ideas, hopes, and concerns for the future of Saguaro National Park. We have learned a great deal and have been challenged and inspired by your thoughtful comments and willingness to share your feelings about this special place.

The planning team has conducted extensive public involvement activities while simultaneously gathering data and conducting additional research. Using the foundation provided in the legislation that established the park, the park's purpose for being created, the significant resources in the park, the information provided by the public, and the preliminary results of data gathering, the planning team developed three preliminary draft alternative concepts of how the park might look in the future. An important part of the alternatives are the management zones that have been developed and that are applied to each alternative in different ways. This newsletter presents the preliminary draft alternatives and a summary of the management zones for your review and requests your comments. Eventually, a single vision (preferred alternative) for the future of Saguaro National Park will be selected, but we are a long way from making that decision.

In addition, the National Park Service is required to address carrying capacity in a general management plan. As explained in more detail later in this newsletter, managing carrying capacity is an important aspect of managing the park. Trail use in the park is another important aspect of visitor use, and it is an important topic to many park users. Therefore, a comprehensive trails plan will be developed following the General Management Plan. In preparation for the trails plan, we have included some information on trail types and criteria. We would like to hear your comments on the carrying capacity and the trail information.

The park has been conducting a transportation study analyzing park transportation corridors and their relationship to state and county transportation plans. We presented some of these data to you during our March meetings. As a result of this study, transportation engineers will recommend various ways to protect visitors and resources. The alternatives present some of the kinds of changes that might be recommended. In addition, actions in alternatives 2, 3, and 4 also convert some internal park roads to trails. The recommendations for any changes to the traffic patterns will be described in the Draft General Management Plan / Environmental Impact Statement, which will be available for public review and comment in spring 2006.

The NPS preferred course of action, the preferred alternative, has not been identiinclude your comments as part of an analysis process. The preferred alternative could be one of the following alternatives, or a combination of several elements chosen from any of the alternatives. The preferred alternative will be included in the Draft General Management Plan / Environmental Impact Statement.

We sincerely value your input regarding the future management direction of the park and thank you in advance for your time and participation. Public communication, collaboration, and cooperation are essential to develop a successful plan for the preservation and conservation of park resources.

Sarah Cranhead

Sarah Craighead Superintendent

General Management Plan Saguaro National Park 3693 South Old Spanish Trail Tucson, Arizona 85730-5601

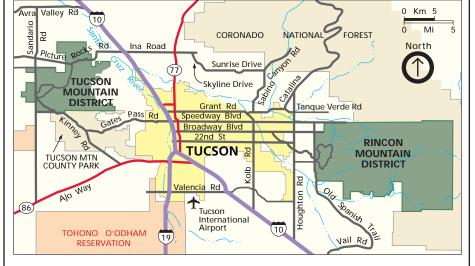
E-mail: SAGU\_planning@nps.gov Phone: 520-733-5107

Park home page: www.nps.gov/sagu/index.htm

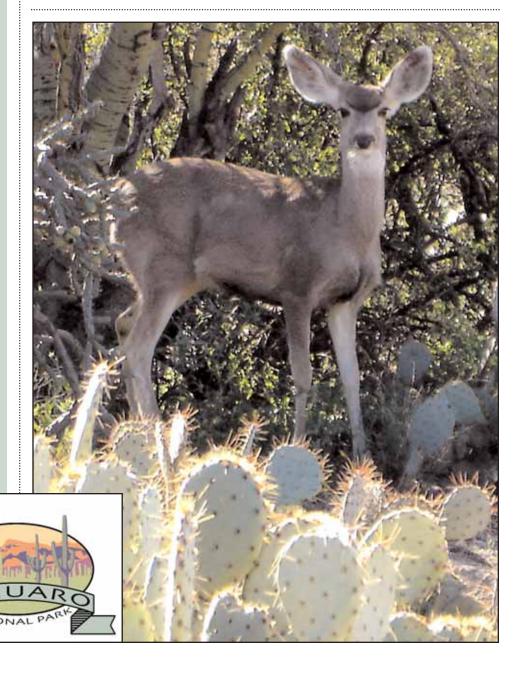
NPS Planning home page:

http://parkplanning.nps.gov/projectHome.cfm?projectId=11017

and click on Saguaro National Park



**Park Map** General Management Plan Saguaro National Park



#### **BACKGROUND**

Saguaro National Park was established by President Hoover on March 1, 1933. Originally named Saguaro National Monument, the name was changed to Saguaro National Park by an act of Congress on October 14, 1994. The park's boundaries have been enlarged several times. The park now totals 91,445 acres, which includes 71,400 acres of designated wilderness.

This mountainous park has two districts — the Rincon Mountain District (RMD) east of Tucson and the Tucson Mountain District (TMD) west of Tucson. Both districts of the park are in Pima County, Arizona, and are separated by the city of Tucson. The Rincon Mountain District is bordered on the east and portions of the north and south by the Coronado National Forest. Residential developments border sections of the western, southwestern, and northwestern boundaries of this district. The Tucson Mountain District is bordered primarily by Tucson Mountain Park on the south and residential development on the north, east, and west.

Pima County has a population of more than 890,000, and the city of Tucson's population is more than 750,000 residents. The city is growing rapidly. When the park districts were created, dirt roads connected these distant protected areas to the city. The 30 miles separating the two park districts are now completely filled by the city of Tucson. The city limits are nearly at the park boundaries, and the park districts have become islands of wildness in a sea of urban development.

Saguaro National Park protects a superb example of the Sonoran Desert ecosystem, featuring exceptional stands of saguaro cacti, important wildlife habitat, critical riparian areas, and associated mountains. Saguaro National Park also protects significant cultural resources, including national-register-listed or -eligible archeological resources, places important to American Indian cultural traditions, and historic structures.

A visit to Saguaro National Park allows visitors to come in close contact with one of the most interesting and unusual

collections of desert life in the United States. Visitors of all ages are fascinated and enchanted by the desert giants, saguaro cacti, especially their many interesting and complex interrelationships with other desert life. The park provides exceptional opportunities for visitors to experience solitude and discover nature on their own, to educate people through close interaction with the environment, and to see the outstanding and diverse scenic features of this classic desert landscape.

Annual recreational visitation to the park has averaged around 700,000 in the last decade. The typical peak period of visitation at Saguaro is January through March. The months of the year with the lowest visitation levels are July and August. The heat of the desert makes the summer months less desirable for many of the activities offered at the park. Most of the park's visitors participate in day use activities such as hiking, walking, horseback riding, scenic driving, and educational programs. Due to the proximity of the park to Tucson, a large number of Saguaro's visitors are local to the area and have visited the park many times.

#### **INFORMATION GATHERING AND ANALYSIS**

Comments and suggestions offered by hundreds of participants have provided NPS planners with important insights about what park visitors, neighboring landowners, county officials, scientists, and others think about the future of the park. You gave us your thoughts, ideas, concerns, and suggested future visions for the park during our first public involvement efforts. We distributed a newsletter requesting your comments and held public meetings in June 2003. We met with our partners (representatives from city, state, county, and federal agencies) in July 2003, and we met with representatives from neighborhood associations, conservation organizations, bicycling organizations, hiking/trail running clubs, and equestrian groups in November 2003. Elected officials were also contacted. Throughout the planning process, Native American tribes were notified, and consultation with interested tribes continues as an ongoing effort by the park superintendent. The planning team

appreciated hearing and reading your thoughts and ideas on the future of Saguaro National Park.

During the past two years we have also been gathering data and conducting research activities, including preliminary transportation data from the ongoing transportation study, the results of the visitor use study, the results of a noise/decibel level study, and information on ethnographic resources. In addition, the park staff generated maps and other information indicating the location and condition of habitat for the park's rare and endangered species, the significance and condition of the park's cultural resources, soil stability, trails, riparian areas, wildlife habitat, road corridors, and other park features. We presented the preliminary results of our data-gathering and research activities in the March 2005 newsletter and also met with you and our partners to discuss the data and respond to any questions.

In developing these preliminary alternatives, the planning team had many considerations to include in its analysis. The actions called for in the last *General Management Plan* (1988) were reviewed for their relevance to this new management plan. The plans of neighboring state, county, and federal agencies were also reviewed and assessed. County and state agencies are currently developing transportation plans that will affect access to the park. The park already contains congressionally designated wilderness, which must be managed in accordance with the Wilderness Act (see Wilderness maps on page 4).

All of the above information has been analyzed and used to develop the draft preliminary alternatives presented in this newsletter for your review and comment.

#### **MAJOR ISSUES**

Many aspects of the desired future conditions of Saguaro National Park are defined in the establishing legislation, the park's purpose and significance statements, and established laws and policies. The resolution of questions or issues that have not already been addressed by legislation or laws and policies are the basis for developing different alternatives or approaches to managing the park into the future, because usually there is more than one way an issue could be resolved. As with any decision-making process, there are key decisions that, once made, will dictate the direction of subsequent management strategies. Based on public and partner comments and NPS concerns, the following six major questions or issues were identified for Saguaro National Park. The bullets following each issue reflect the various points that need to be considered in resolving each major issue. This information is based on internal or external comments received or information supported by research and/or management experience.

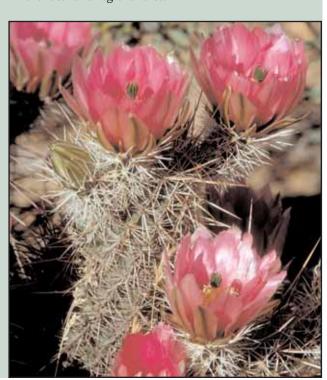
- 1. What are the appropriate types of resource protection strategies that the National Park Service should use while providing visitors with the opportunity to experience and learn about the resources?
- The majority of the park is designated wilderness, and managing for wilderness values is challenging in light of the increasing demand being placed on the park from a growing urban population.
- When visitors travel off designated trails, they can impact sensitive resources.
- Resources are being lost because of vandalism and theft.
- The high density of trails in some areas of wilderness may not be consistent with wilderness mandates.
- Resources such as saguaro forest, riparian areas, and other habitats for threatened and endangered species are particularly sensitive to visitor use.
- Facility locations can affect the park's ability to manage for quality wildlife habitat.
- Poorly designed and unmanaged trails can lead to erosion and other resource impacts.
- Increasing the park's development footprint to accommodate increasing use may impact important park resources.

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- The Madrona/Chimenea area is an extremely fragile riparian habitat.
- Development along park boundaries is threatening scenic viewsheds and night skies and contributing to invasive species encroachment.
- The public has expressed concerns about a reduction in recreation opportunities.
- 2. What is the appropriate kind of vehicle traffic that is compatible with protecting park resources and visitor experiences?
- High volumes and speeds of commuting traffic impacts

- resources, especially wildlife.
- High volumes and speeds of commuting traffic pose safety threats to visitors and their park experiences.
- Many people enjoy driving through the park and consider the drive a great scenic experience.
- Other opportunities for accommodating commuting traffic in the area are or will be available to commuters and need to be considered to reduce the volume of traffic on park roads.
- Roads and traffic impact the designated wilderness located on either side of the roads.
- 3. What is the appropriate message for interpretation and educational activities inside the park vs. outside the park?
- Partnerships with local and regional educational institutions could support resource-related educational opportunities inside and outside the park.
- The Rincon Mountain District visitor center and parking area are too small and outdated for current demands.
- 4. What are different ways that the National Park Service can meet its obligation to maintain biodiversity and optimize habitat values for native species?
- Increasing urbanization in the region greatly influences wildlife habitat and connections. The park plays a significant role in protecting a core area of high-quality habitat. The park's proximity to other large public lands makes protection of corridors important.
- Visitor use levels and behavior can impact natural ecosystems.
- The placement of park facilities can affect wildlife habitat and connections.
- Collaborating with other regional entities could promote wildlife values.
- Some large animals that live in the park have habitat requirements that reach beyond park boundaries.
- The park contains an abundance of diverse plant life and riparian areas that are necessary for the preservation of saguaro cacti.
- Urban development and visitor use has the potential to increase invasive species.
- 5. What are appropriate ways of using and managing the Manning Camp and the Madrona/Chimenea pools areas?
- The fire management activities at Manning Camp may impact wilderness and natural resource values.
- Manning Camp is a historic resource that needs to be protected.
   The Madrona/Chimenea area has highly diverse and
- The Madrona/Chimenea area has highly diverse and sensitive natural resources that would be impacted by an increase in use.
- The current use levels near the Madrona/Chimenea

area are very low, and there needs to be careful consideration of whether the resources could withstand additional visitor use.

- 6. What are the appropriate density, types, and use levels of trails in various parts of the park?
- More bicycling opportunities are desired by some members of the local community. Other members of the local community have expressed concerns over bicycle use due to visitor conflicts and resource impacts.
- Connections to regional trails are desired by some members of the local community.
- Any changes to the existing trail systems in the park need to be based on sound rationale, good site-specific information on plant species, potential wildlife habitat, and soil stability.
- Some conflicts exist between user groups on multiuse trails, especially between bicyclists and horseback riders.
- The density and location of trails can influence wildlife habitat viability and cultural resource protection.
- Poorly designed and unmanaged trails can lead to erosion and other resource impacts.
- The density of trails, levels of trail use, and types of trail activities in designated wilderness need to adhere to requirements of the Wilderness Act.
- Trail planning in the park should be considered in context of the supply and demand for trail opportunities in the local and regional area.



#### TRANSPORTATION STUDY

Many park roads are no longer safe for visitors or commuters and are heavily impacting wildlife due to high volumes of traffic and speeds. This problem is reflected in major issue #2 — What is the appropriate kind of vehicle traffic that is compatible with protecting park resources and visitor experiences? To develop alternative solutions to this issue, the park has been conducting a transportation study, which is scheduled for completion in fall 2005. Preliminary data from the transportation study (presented to the public in March 2005) indicate that some park roads already exceed the level of service for which they were designed. The park contains two types of road corridors: interior roads such as Golden Gate Road, Hohokam Road, and Cactus Forest Loop Drive, and through-park roads such as Picture Rocks Road and Sandario Road. The alternatives call for converting some internal park roads to trails as well as implementing selected recommendations from the transportation study.

The park's goal is to provide a high-quality experience for visitors and to protect wildlife. Implementing the recommendations of the transportation study is the first step toward achieving that goal. The study will recommend a variety of traffic-calming devices. These devices could range from being relatively restrictive, such as installing entrance fee kiosks and speed bumps, to being minor operational changes such as reducing speed limits. Recommendations could also include installing stop signs or traffic lights, placing limits on commercial traffic, and creating one-way traffic patterns. Because the study has not been completed, at this time we do not know exactly what these recommendations will be. The level of change that might occur is outlined in each alternative.

The *Draft General Management Plan / Environmental Impact Statement* will contain the transportation study's traffic-calming recommendations for each alternative and

for the preferred alternative. The draft document is scheduled for distribution for your review and comment in spring 2006.

Picture Rocks Road is maintained by the National Park Service; Sandario Road is maintained by Pima County (both are through-park roads). Pima County and the state are currently developing their long-range transportation plans, which would provide alternate routes around the park. If future regional transportation improvements and traffic-calming devices on roads such as Picture Rocks are not effective in providing a better quality experience for visitors and better protecting wildlife, then the park's long-term vision is to convert some through-park roads to trails. This action must be taken in close cooperation and coordination with county and state offices.

#### **MANAGEMENT ZONES**

Management zones are descriptions of desired conditions for park resources and visitor experiences in different areas of the park. Management zones are determined for each national park system unit; however, the management zones for one unit will likely not be the same for any other national park system unit (although some might be similar). The management zones identify the widest range of potential appropriate resource conditions, visitor experiences, and facilities for the park that fall within the scope

of the park's purpose, significance, and special mandates. Six management zones have been developed for Saguaro National Park. They are summarized below and will be detailed in the *Draft General Management Plan*. It may help to think of the management zones as the colors an artist has in front of him with which to paint a picture.

In formulating the action alternatives (alternatives 2, 3, and 4), management zones were placed in different locations or

configurations on a map of the park according to the overall intent (concept) of each of the alternatives. (Because alternative 1 represents existing conditions, and there are no existing management zones, alternative 1 maps do not show the management zones.) Please note that private, state, and county-owned properties are not zoned.

#### **TABLE 1: MANAGEMENT ZONES SUMMARY**

	Sensitive Resource Protection Zone	Primitive Zone	Semi-primitive Zone	Natural Zone	Sightseeing Corridor Zone	Developed Zone
Resource Condition	Pristine resource conditions. Protect fragile and unique resources.	Pristine resource conditions. Protect natural processes, biodiversity, and the ecosystem.	Excellent to pristine resource conditions. Protect natural processes, biodiversity and the ecosystem.	Good to excellent resource conditions. Maintain the natural setting. Protect natural resources to the highest level possible.	Low to moderate modification of resources for visitor use and safety.	Moderate to high modification of resources to provide visitor and administrative services.
Visitor Experience	Research opportunities. Public access via ranger-led tour only.	Primitive recreation opportunities with low visitor use. Hiking, horseback riding, and camping offering solitude, challenge, adventure, and discovery. Remote, difficult to access.	Primitive recreation opportunities with low to moderate visitor use. Walking, hiking, horseback riding offering some solitude. A sense of being close to nature. Sights and sounds of nearby private development may intrude.	Diverse recreation opportunities. Walking, hiking, biking, horseback riding, picnicking, interpretive trails offering an opportunity to observe and enjoy the natural environment. Sights and signs of people may be present.	Scenic touring. Access and links for biking, horseback riding, motorized vehicles, walking, hiking. Offers a safe, unhurried, pleasant, and educational experience while traveling along park corridors.	Orientation, interpretation, education, support services, close interaction with park staff. High visitor use.
Facilities	None, except where absolutely essential for resource protection or visitor safety.	Minimal: unpaved trails, direction and safety signs, and backcountry campgrounds.	Minimal to moderate: unpaved trails along with direction and safety signs	Moderate: paved and unpaved trails, interpretive signs, and picnic areas	Moderate to high: paved and unpaved roads and trails, pullouts, overlooks, interpretive signs, traffic calming devices.	High for visitor services: visitor centers, administration buildings, park housing, paved and unpaved interpretive trails, kiosks, parking areas, trailheads, picnic areas
Management	Extremely low visitation and very low management activities.	Low visitation and minimal management activities.	Low to moderate visitation and moderate management activities.	Moderate visitation and moderate management activities.	Extremely high visitation and intense management activities.	Extremely high visitation and intense management activities.
Trail Types (see Trails discussion)	С	С	В, С	А, В	А, В	А, В

The desired conditions for cultural resources would remain the same in all alternatives. Therefore, the cultural resources are in a parkwide management zone and this zone does not appear on any map.

CULTURAL RESOURCES PARKWIDE MANAGEMENT ZONE								
Resource Conditions	Visitor Experience	Level of Management and Facilities						
Cultural resources that are on or eligible for inclusion in the National Register of Historic Places will be preserved and maintained and may be used for interpretive purposes where appropriate.	Visitors will have opportunities to learn about and see the cultural resources of the park. These resources might include structures, landscapes, archeological sites, rock art, or special historic period	Inventories will be conducted to identify and evaluate cultural resources and nominate appropriate sites to the national register.						
	districts.	Some historic structures might be adapted to accommodate visitor or administrative uses.						

### THE ALTERNATIVES

The NPS planning process requires development of action alternatives (alternatives 2, 3, and 4) for comparison with no change in current park management and trends (alternative 1). The alternatives in this general management plan are the different pictures that could be painted with the colors (management zones) available. Each of the alternatives has an overall management concept and a description of how different areas of the park would be managed. The concept for each alternative gives the artist (or in this case the NPS staff) the idea for what the picture (alternative) is going to look like. For example, perhaps one management

zone is called "backcountry" and another zone is called "frontcountry." An alternative whose concept is to keep most of the park in an undeveloped and natural/wild condition would have more of the backcountry zone than the frontcountry zone. Both zones might also be larger or smaller and in different locations in different alternatives, depending on the overall concept for each alternative.

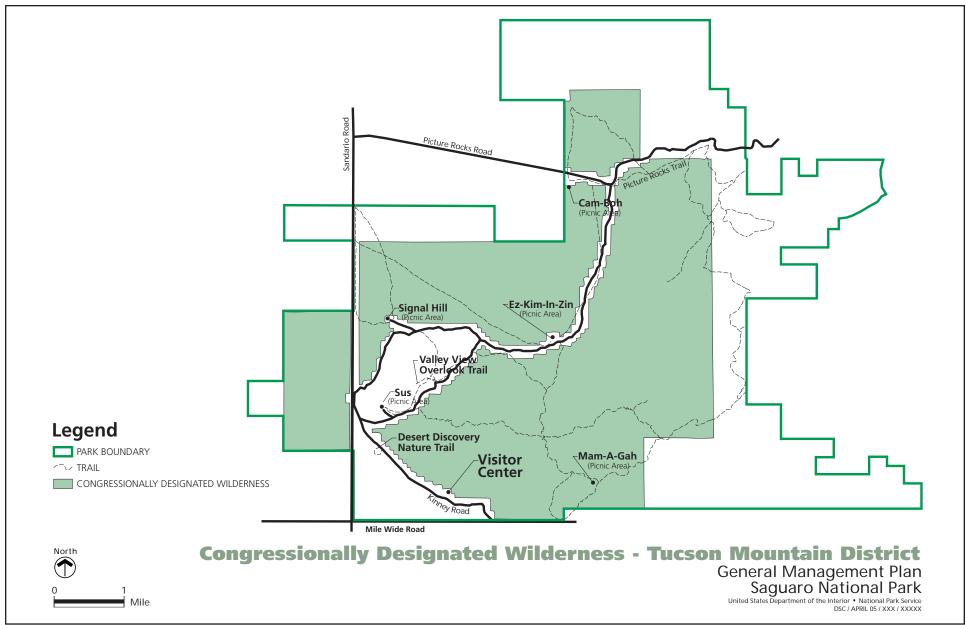
The action alternatives present different ways to manage resources and visitor use and improve facilities and infrastructure at Saguaro National Park. The three action alternatives embody the range of what the public and the National Park Service want to see accomplished with regard to natural resource conditions, cultural resource conditions, and visitor use and experience at Saguaro National Park. The National Park Service would continue to follow existing agreements and servicewide mandates, laws, and policies regardless of the alternatives considered in this plan. However, actions or desired conditions not mandated by policy, law, or agreements can differ among the alternatives.

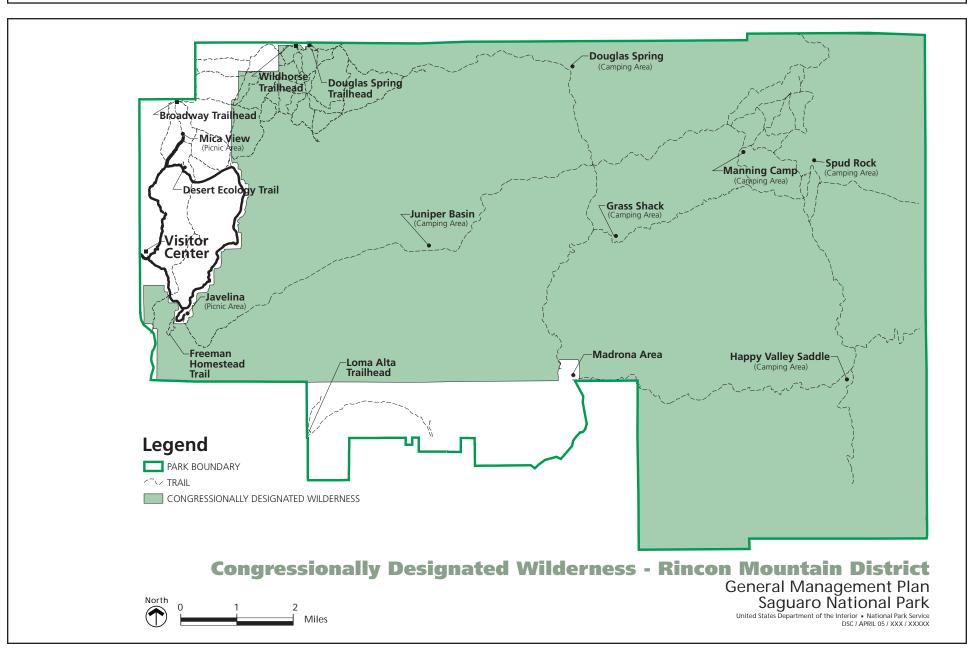
#### **WILDERNESS**

The Wilderness Act mandates the types of visitor and administrative activities as well as the level and types of facility development permitted in designated wilderness. The following maps show the designated wilderness boundaries. These boundaries are not repeated on the alternative maps. In all alternatives the designated wilderness is zoned sensitive resource, primitive, or semi-primitive. These zones might also extend outside the designated wilderness.

Please look at the wilderness maps and remember that the park has designated wilderness that must be considered in understanding each of the alternatives in its entirety.







#### **ALTERNATIVE 1 — NO ACTION (CONTINUE CURRENT MANAGEMENT)**

The no-action alternative is a continuation of current management and trends. This alternative serves as a basis of comparison with the three action alternatives. Examining the no-action alternative is often helpful in understanding why the National Park Service or the public may believe that certain future changes are necessary or advisable.

The park's enabling legislation and NPS management policies would provide guidance for all of the alternatives, and under alternative 1, guidance from the 1988 *General Management Plan* would continue to guide park management. The park has implemented many of the actions identified in the 1988 *General Management Plan*. The park would continue to be managed as it is today, with no major change in management direction.

#### **Resource Conditions**

- Natural resources and processes would be preserved while accommodating a range of visitor uses and experiences. Fragmentation in habitats, corridors, and regional ecosystems would continue.
- Cultural resources would continue to be preserved, protected, and interpreted.

#### Roads

- Multiple entrances to the Tucson Mountain District would continue to allow access for non-park visitors, resulting in excessive traffic, high speeds, and conflicts between commuters and park visitors.
- The existing road corridors would continue to be managed through traffic signs and ranger patrols. Traffic laws and regulations would continue to be enforced by park rangers at the current levels.
- Park management would continue to discourage visitors from traveling some Tucson Mountain District roads such as Picture Rocks Road and Sandario Road due to safety concerns caused by excessive commuter speeds and volume.
- Resource damage would continue along roadways.
   Staff would not control infestations of nonnative plants along roadways due to unsafe conditions caused by heavy traffic and excessive speeds.

#### Trails

- The current Cactus Forest and Tucson Mountain
   District trail plans would guide trail management in the
   park. User conflicts, maintenance problems, dupli cate/parallel trails, and resource damage would contin ue to be issues. Closure and revegetation of social trails
   would continue as recommended in the current trail
   plans.
- Biking would continue to be permitted on park roads and on the middle section of the Cactus Forest Trail.
   Biking would not be permitted on any additional trails.

- The Loma Alta trailhead to the Hope Camp, North Hope, and the Ridge View trails would remain informal. The trails would continue to be used by hikers and equestrians. There would be limited opportunities to connect to regional trails outside park boundaries.
- · There would be no new trailheads or trails developed.

#### Madrona/Chimenea Area

 Access to the Madrona/Chimenea area would continue to be limited. Visitors would need to travel several miles over difficult trails to access the area. The facilities would remain closed, and when funding permits these facilities would be removed as required by the Health Department.

#### Camping

• Camping would continue to be permitted in the backcountry of the Rincon Mountain District. No additional campsites would be developed.

#### **Interpretation and Education Programs**

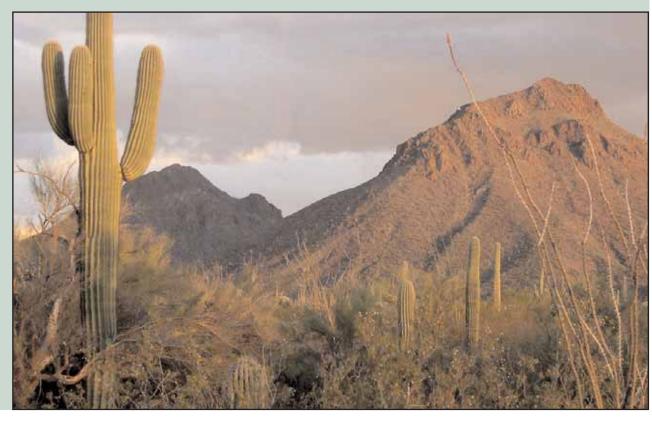
- The Rincon Mountain District visitor facility would remain at its current size, which would not meet the needs of a growing population, particularly a rapidly expanding school system.
- The interpretive displays in the Rincon Mountain District visitor center would remain outdated.

#### **Management Activities and Facilities**

- Facilities would remain at their current levels; staffing would not be increased.
- Administrative facilities in the Rincon Mountain
   District would remain inadequate. This district would
   remain too small to meet staff needs. This district
   would continue to serve local residents as its primary
   visitors.
- Administrative facilities in the Tucson Mountain
   District would continue to receive a primarily regional
   and national visitation.
- The Manning Camp area would continue to be used for fire crew activities. Facilities to support administration, such as the water supply system, the vault toilet, the historic cabin, the corral, and the tent cabins, would remain.

#### Partnerships

• The park would continue to have relationships with its partners. These partnerships include universities, colleges, schools, the Rincon Institute, and friends groups.



#### **ALTERNATIVE 2**

## Concept

In alternative 2 the emphasis would be on protecting the park's ecological processes and biological diversity by connecting wildlife and plant habitats with corridors. Management efforts would focus on creating connections between isolated wildlife habitats and corridors. Park managers would make choices and take actions that would best achieve ecological/biological diversity. Visitation would be highly managed and would be redirected, when necessary, to protect sensitive resources and minimize impacts on resources. Only basic facilities for essential visitor safety and services would be provided inside the park. Where appropriate, existing essential facilities would be relocated to less sensitive areas inside the park. Many facilities would be relocated to areas outside park boundaries.

#### Rationale

This alternative concept was developed because the biological diversity and ecological processes of the park, though remarkable due to the range of elevation zones and mix of riparian and desert habitats, are in danger from habitat fragmentation. In addition, the public expressed concern that overuse of the park and increasing urbanization would threaten the park's qualities of solitude, quiet, and naturalness. This alternative would help mitigate the effects of fragmentation of habitat as the city of Tucson's population continues to increase.

#### Resource Conditions

- Natural resource protection would be accomplished by removing impediments that create fragmentation of habitats and isolated wildlife corridors. Revegetation efforts would be increased.
- Cultural resources would be preserved and protected as described in the parkwide cultural resource management zone.

#### Roads

- The actions recommended in the ongoing transportation study and future comprehensive trails plan will reflect this alternative's concept of protecting the park's ecological processes and biological diversity.
- A number of traffic-calming devices would be added to the sightseeing corridor zone. In this alternative, the traffic-calming devices applied to Picture Rocks Road and perhaps other through-park roads would be more restrictive than in alternatives 3 and 4.
- Golden Gate Road (between Ez-Kim-In-Zin picnic area and Picture Rocks Road), an internal park road, would be converted to a hiking, biking, and equestrian trail that would be more compatible with wilderness on either side of the road.

#### Trails

- If alternative 2 were selected as the preferred management concept, the future comprehensive trails plan would likely propose actions such as classifying some trails for hiker or equestrian use only, removing and rehabilitating duplicate/parallel trails in both park districts, and prohibiting off-trail travel in the Tucson Mountain District. The comprehensive trails plan will recommend sustainable trail design and removal/rehabilitation of appropriate selected trails as in alternatives 3 and 4.
- Alternative 2 contains the highest percentage of the primitive and semi-primitive zones, which do not permit bicycles.

#### Madrona/Chimenea Area

- Access to the Madrona/Chimenea area would be extremely limited to provide the highest level of protection to the area's sensitive riparian resources. Access would require a park-issued permit.
- No public facilities would be available; housing for park staff would be developed.

#### Camping

- Camping would be permitted in the backcountry of the Rincon Mountain District. No new camping opportunities would be developed.
- Backcountry camping would continue at Manning Camp; however, administrative facilities, except for the historic Manning Cabin, would be removed.

#### **Interpretation and Education Programs**

 Interpretation and education programs would focus on the resource qualities of the park. Existing administrative facilities in the Rincon Mountain District could be adaptively reused as an education center with classrooms for training and teaching and additional visitor services. The current visitor center would be used for park orientation.

#### **Management Activities and Facilities**

- Staff operations at the Rincon Mountain District could be moved off-site if a suitable location was found.
- Facility development would be kept at the periphery of the park districts to the extent possible.

#### Partnerships

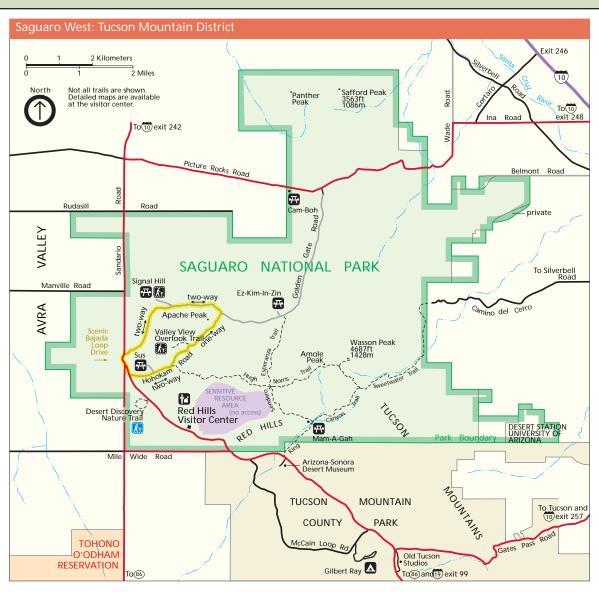
- The park would continue to have relationships with its partners. These partnerships include universities, colleges, schools, institutes, and friends groups.
- Partnerships would continue with city, state, and federal land managing entities and nongovernment organizations to protect migration corridors, connect habitats, and protect the fragile Sonoran Desert ecosystem.
- Partnerships would be developed with the city and state to coordinate actions related to the transportation study and minimize the impacts on visitors and neighbors.

#### **ALTERNATIVE 1 — NO ACTION (CONTINUE CURRENT MANAGEMENT)**





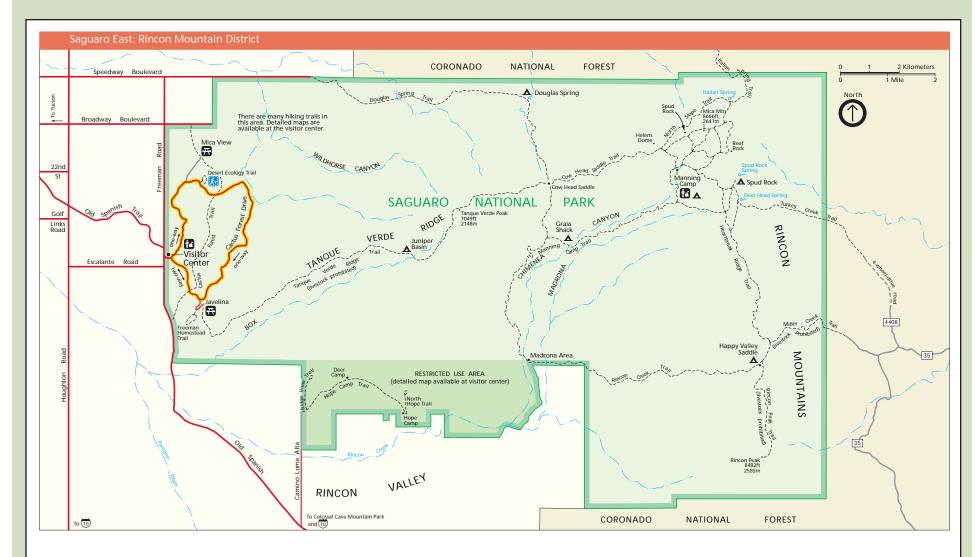




# **Tucson Mountain District**

General Management Plan Saguaro National Park

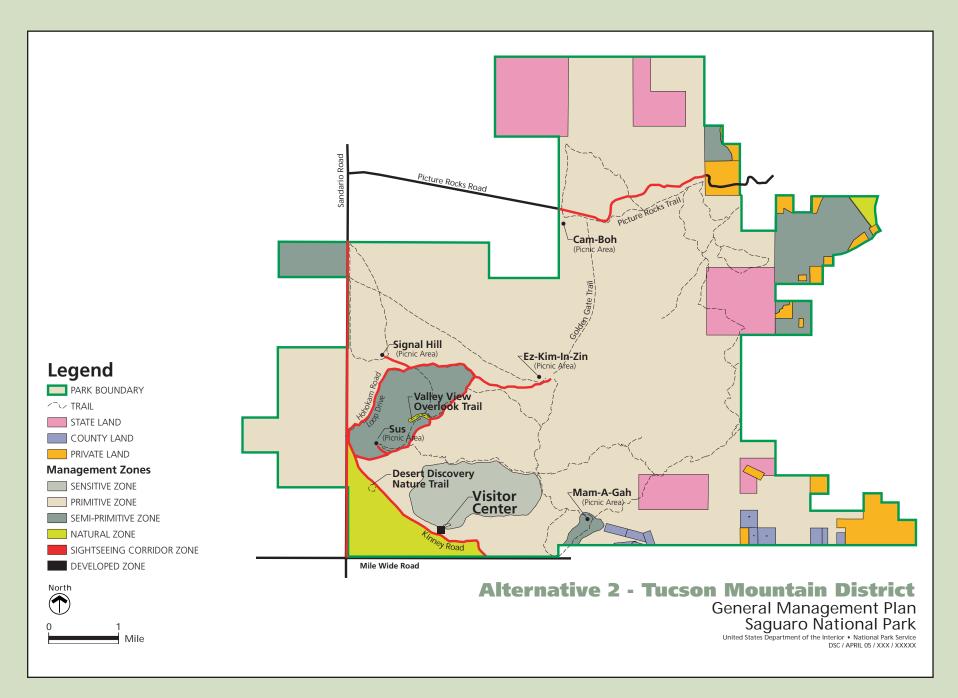
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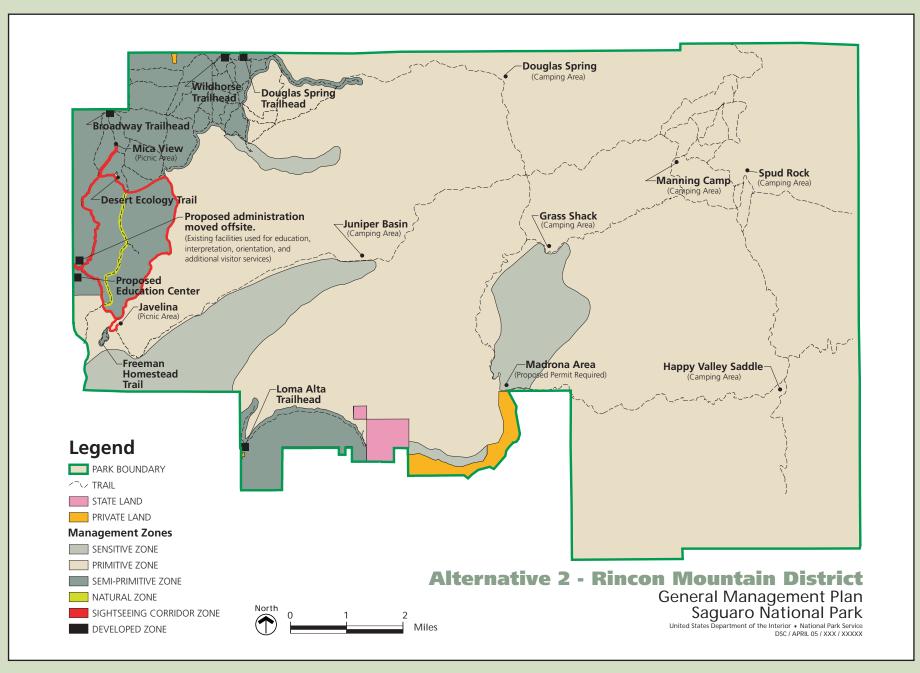


# **Rincon Mountain District**

General Management Plan Saguaro National Park

United States Department of the Interior • National Park Service
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#### **ALTERNATIVE 3**

#### Concept

In alternative 3 the emphasis would be on providing a wider range of opportunities for visitors that is compatible with the preservation of park resources and its wilderness characteristics. Natural resources would be protected by relocating visitor activities now occurring in sensitive areas to areas that could withstand higher levels of visitation. Management efforts would focus on developing additional opportunities for visitors to enjoy and learn about the park. Visitors would have a variety of activities in easily reached areas of the park. Primitive visitor experiences would be available in areas that are harder to reach. Facilities would be expanded to provide additional support Trails for visitor activities.

#### Rationale

This alternative concept was developed because the public wanted the park to expand programs and opportunities for a growing diverse population to experience and learn about the giant cactus and associated plants, animals, and landforms of the Sonoran Desert. In addition, the public expressed an interest in the park providing more diverse recreational opportunities, including trails for specific user groups. The public also felt that the park should plan for increased demands resulting from urban growth surrounding the park.

#### **Resource Conditions**

- Natural resource protection would remain a high priority for park management; however, some impacts could be acceptable to accommodate a diverse range of visitor opportunities and services.
- Cultural resources would be preserved and protected as described in the parkwide cultural resource management zone.

#### Roads

- The actions recommended in the ongoing transportation study and future comprehensive trails plan will reflect this alternative's concept of providing a wide range of opportunities for visitors that are compatible with the preservation of park resources and wilderness characteristics.
- A number of traffic-calming devices would be added to the sightseeing corridor zone. In this alternative the

- traffic-calming devices applied to Picture Rocks Road and perhaps other through-park roads would be less restrictive than alternative 2, but more restrictive than alternative 4.
- Golden Gate Road (between Ez-Kim-In-Zin picnic area and Picture Rocks Road), an internal park road, would be converted to a hiking, biking, and equestrian trail that would provide a wide range of opportunities for visitors while preserving the park's resources and wilderness characteristics. The two-way Hohokam Road, another internal park road, would be converted to a one-way loop drive.

- If alternative 3 were selected as the preferred management concept, the future comprehensive trails plan would likely propose actions such as creating some hik- Partnerships ing and biking opportunities with connections to regional trails in both districts, formalizing the Loma Alta trailhead, and classifying some trails for hiker or equestrian use only. As in alternatives 2 and 4, the comprehensive trails plan will recommend sustainable trail design and removal/rehabilitation of selected trails.
- Alternative 3 contains the highest percentage of the natural zone, which does permit bicycles on trails designated for bicycle use.

#### Madrona/Chimenea Area

Existing infrastructure would be replaced with a visitor contact station. The station would allow for daily ranger presence. By limiting access to one trail and providing daily ranger presence, the area's sensitive riparian resources would continue to receive a high level of pro-

#### Camping

Camping would be permitted in the backcountry of the Rincon Mountain District. Additional backcountry camping opportunities might be developed above 5,000 feet in this district.

#### **Interpretation and Education Programs**

Additional interpretive media and programs would be provided that focus on the history of the area as well as stewardship of natural resources. A learning center, science station, and education center could be developed.

#### Management Activities and Facilities

- As in alternative 2, staff operations at the Rincon Mountain District would be moved off-site if a suitable location were found. An education center near Camino Loma Alta would be developed with suitable partnerships. A visitor contact and science station would be developed in the Madrona/Chimenea area for research functions. When private property is transferred to the park, the facilities would be used as a learning center. Existing administrative facilities would be used as an education center.
- Fire crew support facilities would be moved from Manning Camp to a new off-site administration area.

- The park would continue to have relationships with its partners. These partnerships include universities, colleges, schools, institutes, and friends groups.
- Partnerships would be sought with city, state, and federal entities to develop complementary interpretive programs and links to regional trails and shared visitor facilities, and to explore mutually beneficial mass transit options.
- Partnerships would be used to develop an environmental education center adjacent to the southern boundary of the Rincon Mountain District.



#### **ALTERNATIVE 4**

#### Concept

In alternative 4 the emphasis would be on managing each district of the park in its regional context. Resource protection and visitor activities would be based on resource sensitivity and surrounding land use patterns. Resource management activities in the Rincon Mountain District would emphasize protecting wilderness qualities compatible with neighboring land management activities. Resource management activities in the Tucson Mountain District would protect resources while complementing neighboring recreational and educational opportunities. Visitors to the Rincon Mountain District would enjoy a superlative primitive experience with extremely limited development. Visitors to the Tucson Mountain District would enjoy a wide range of visitor experiences — from scenic motor touring to educational nature walks. Facilities in the Rincon Mountain District would be minimal to reflect a wilderness experience, while facilities in the Tucson Mountain District would be expanded to accommodate a diverse range of experiences.

#### Rationale

This alternative concept was developed because the park must continue to educate visitors by providing different opportunities to experience the spectacular contrasts in the form, color, and sound of the Sonoran Desert. The park must also protect and provide access to its soughtafter characteristics, such as natural quiet and expansive views that result in visitors' perceptions of serenity, remoteness, and closeness to nature.

In this alternative, links to regional opportunities would be provided based on the regional context of each district. For example, the Rincon Mountain District is surrounded on three sides by other federal agency wilderness. The Tucson Mountain District is surrounded by other highly visited attractions such as the Arizona-Sonora Desert Museum, Old Tucson, and Tucson Mountain Park.

#### **Resource Conditions**

Natural resource protection in the Rincon Mountain District would be accomplished by enhancing the wilderness characteristics of this district. This would include reducing impacts on habitat fragmentation, protecting riparian areas, and providing primitive recreational opportunities that complement adjoining land use patterns.

- Natural resource protection in the Tucson Mountain District would be accomplished by concentrating visitor use and facilities along the sightseeing corridor zone in the park and working with adjacent public land managers to minimize and mitigate visitor use impacts in this district. This would include providing a variety of visitor opportunities for all abilities that complement and link to adjoining Sonoran Desert attractions.
- Cultural resources would be preserved and protected as described in the parkwide cultural resource management zone.

#### Roads

- The actions recommended in the ongoing transportation study and future comprehensive trails plan will reflect this alternative's concept of managing each park district in relation to its regional context.
- A number of traffic-calming devices would be added to Interpretation and Education Programs the sightseeing corridor zone. In this alternative the traffic-calming devices applied to Picture Rocks Road and perhaps other through-park roads would be less restrictive than alternatives 2 and 3.
- Seasonal shuttles would provide access to trailheads on Cactus Forest Loop Drive and Broadway and Speedway boulevards in the Rincon Mountain District. A scenic, educational, motorized tour route would be created in the Tucson Mountain District.

#### **Trails**

- If alternative 4 were selected as the preferred management concept, the future comprehensive trails plan would likely propose actions in the Rincon Mountain District such as restricting horse trailer parking along Broadway and providing additional equestrian opportunities near the park, relocating the Wildhorse and Douglas Spring trailheads off-site, and permitting access to these trail systems via shuttle. Bicycle use would only be permitted on the Cactus Forest loop Drive.
- In the Tucson Mountain District, a comprehensive trails plan based on alternative 4 would recommend actions such as developing parking areas and trailheads for hiking and equestrian use near the Cam-Boh picnic area, and providing links to regional trails for hiking and biking. As in alternatives 2 and 3, the comprehensive trails plan will recommend sustainable trail design and removal/rehabilitation of selected trails.
- For the Rincon Mountain District, this alternative con-

tains a high percentage of the primitive zone, and for the Tucson Mountain District there is a mix of primitive, semi-primitive, and natural zones.

#### Madrona/Chimenea Area

Access to the Madrona/Chimenea area would be by ranger-led tour to provide the highest level of protection to the area's sensitive riparian resources. Existing administrative facilities would be removed.

#### Camping

Camping would be permitted in the backcountry of the Rincon Mountain District. No new camping opportunities would be developed.

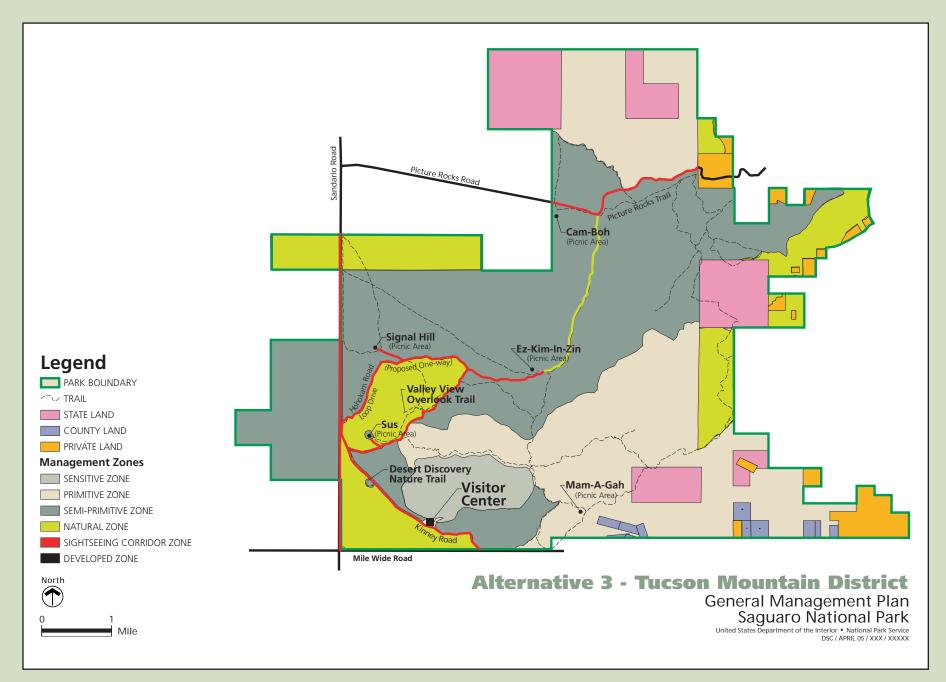
The Rincon Mountain District visitor center would be adaptively used as a wilderness visitor contact station, including interpretation and backcountry permit registration. Programs in the Rincon Mountain District would concentrate on wilderness education, while programs in the Tucson Mountain District would concentrate on the recreational and scenic aspects of enjoying the park's resources.

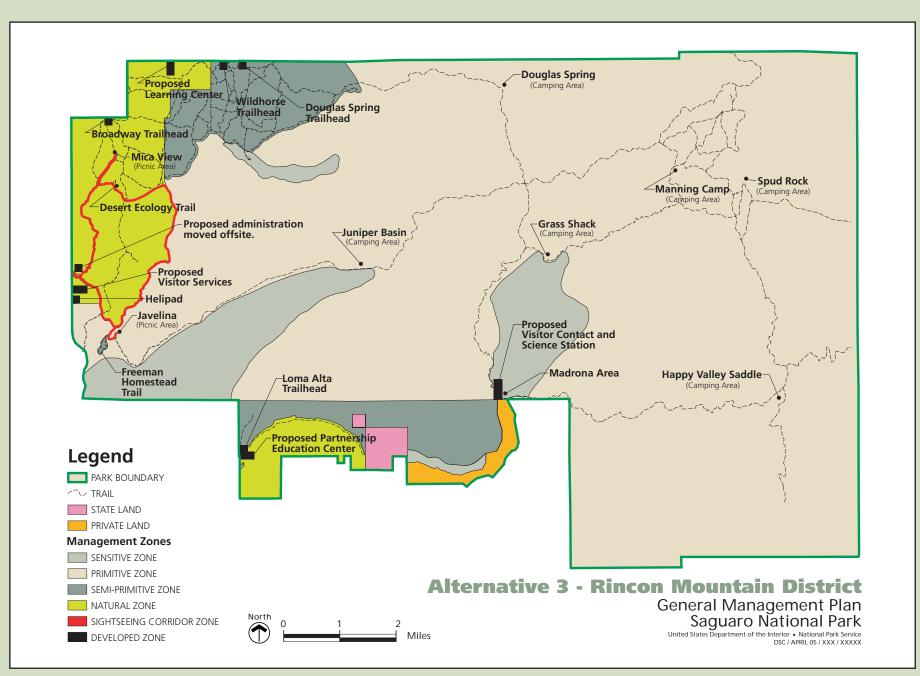
#### **Management Activities and Facilities**

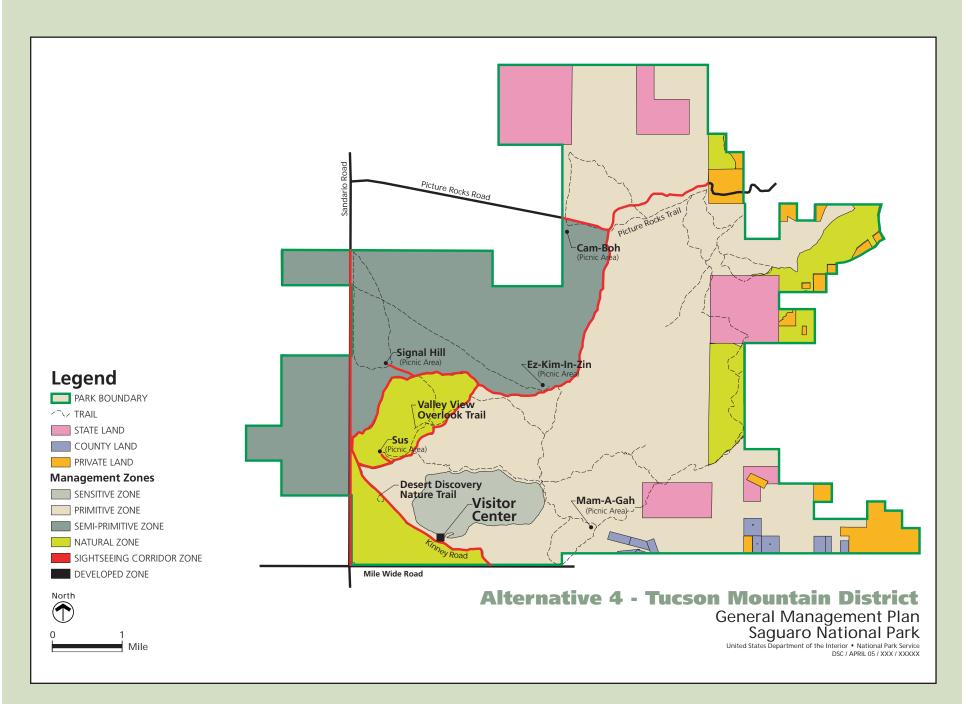
- Staff operations at the Rincon Mountain District would remain in their current location.
- Staff operations and administrative space in the Tucson Mountain District would be expanded to accommodate increased visitor services.
- The historic cabin and small corral would remain at the Manning Camp. All other infrastructure would be removed.

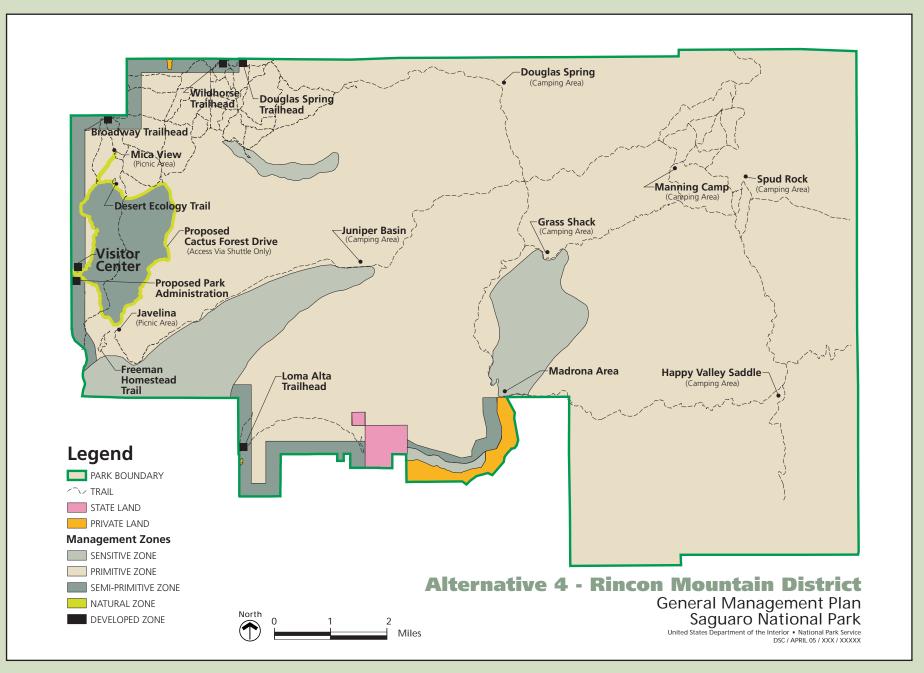
#### **Partnerships**

- The park would continue to have relationships with its partners. These partnerships include universities, colleges, schools, institutes, and friends groups.
- Partnerships would be sought with city, state, and federal entities to develop complementary links and shared visitor facilities with neighboring land management agencies, residential areas, and major attractions.















#### **TRAILS**

The proposed trail system objectives have been included in this newsletter because a new comprehensive trail planning effort will begin as the General Management Plan is being finalized. Although the two plans are separate, the comprehensive trails plan must reflect the management prescriptions chosen in the Final General Management Plan. By including the proposed trail system objectives in this newsletter, the National Park Service is providing the public with the opportunity to comment on trail-related issues now and in the future when the comprehensive trail planning effort begins.

#### TRAIL SYSTEM OBJECTIVES

- 1. Protect natural and cultural resources.
- 2. Provide reasonable access to the trails network and trail-
- 3. Eliminate unnecessary and parallel/duplicate trails.
- 4. Ensure that the resulting trails network is safe and main-
- 5. Provide for a clearly designated trail system.
- 6. Provide for a variety of trail experiences.

#### TRAIL SYSTEM CRITERIA

The future designated trail system and access points would be developed based on four criteria — cultural resources, natural resources, visitor experience, and park operations. These criteria were derived using recommendations from the public, park staff, current park trail plans, and national trail models. Trails will be sustainable and developed with good engineering practices. Natural and cultural resources vary in both their *value* and their *sensitivity*. That is, some resources in the park, such as saguaros or particularly large archeological sites, are considered more valuable than others. Some resources, such as an endangered species or a cultural site on an eroding slope, are more sensitive than others. The park's future trail plan should provide for visitor access and education while protecting the most valued and sensitive resources.

A) Cultural Resources Criteria — Trails will be located to protect important cultural areas that are unique to the park and sensitive to trail impacts, and to avoid archeological sites, Native American sacred sites, and sensitive historic sites.

B) Natural Resource Criteria — Trails will be designed and located to protect important vegetation and wildlife communities that are unique to the park, help restore heavily impacted and environmentally sensitive areas, and direct trail use to areas with suitable

C) Visitor Experience Criteria — Trails will be designed to provide access to a wide range of trail users and to various locations in the park and to avoid or minimize conflicts between trail user types. Trails will be designed to enhance visitor safety. The trail system should provide opportunities for access to a variety of educational and visitor experiences without excessive duplication.

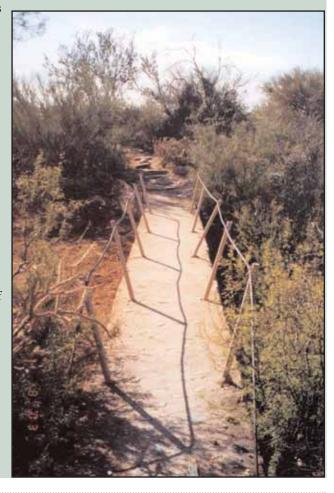
D) Park Operations Criteria — Trails will be designed to maximize the efficiency of maintenance, interpretation, resource management, and visitor protection staffs while minimizing financial costs to the park.

#### TRAIL TYPES

Type A — Wheelchair accessible trails in the frontcountry constructed and maintained according to Americans with Disability Act standards. The trails typically access primary park features. Trail surfaces would be hardened. The use of directional and interpretive signs and structural elements to enhance safety and mitigate erosion is likely.

Type B — Single or multiuse trails constructed and maintained for moderate to heavy use by visitors with beginner to intermediate skills. Trails are maintained to minimize safety hazards and resource impacts. Trails would be constructed of natural materials and have moderate variations and occasional rock or root protrusions. Trail surfaces would be unpaved. Trails would feature directional signs and structures that would minimize safety hazards and mitigate erosion.

Type C — Single or multiuse trails constructed and maintained for light to moderate use by visitors with intermediate to high skill levels. Trails are maintained primarily to minimize resource impacts. Trails would be constructed of natural materials and have moderate to difficult variations and frequent rock or root protrusions. Trail surfaces would be unpaved. Trails might feature directional signs and structures that would minimize safety hazards and mitigate



#### VISITOR CARRYING CAPACITY

General management plans are required to include identification of and implementation commitments for visitor carrying capacities for all areas of the park. The National Park Service defines visitor carrying capacity as the type and level of visitor use that can be accommodated while sustaining the quality of park resources and visitor opportunities consistent with the purposes of the park. It is not necessarily a set of numbers or limits, but rather a process involving monitoring, evaluation, actions (managing visitor use), and adjustments to ensure that park values are protected. There are three principal components that relate to determining the visitor carrying capacity for a national

- ecological or physical capacity, which includes the capabilities of the natural and cultural resources to sustain visitor use without unacceptable damage
- sociological carrying capacity, which includes the ability of visitors to enjoy and appreciate these resources without undue interference by other visitors
- NPS management, which includes the efforts that have been or can be applied to the park to mitigate unwanted impacts. This component relates to the management of things such as roads, parking areas, buildings, trails, and visitor information.

The first step in visitor carrying capacity decision making is are included in the Final General Management Plan / defining desired resource conditions, visitor opportunities, and general levels of development and management for areas of the park. The second step is defining indicators and standards related to visitor use that will be monitored, and the general range of actions that could be taken if the park staff is seeing impacts on resources or visitor experience that exceeds acceptable levels.

An indicator is a measurable variable that can be used to track changes in conditions related to human activity, so

that progress towards desired conditions can be assessed. A standard is the management decision about the minimum allowable condition for an indicator. An example of an indicator and standard are as follows:

*Indicator*: The waiting period required to see an attraction during peak use days. Standard: No more than 10% of visitors wait 10 or more minutes to see an attraction.

Steps one and two are completed as part of the general management plan. Step one, the desired resource conditions, visitor opportunities, and general levels of development and management, is summarized and presented for your review and comment in this newsletter. The planning team is working on step two, developing a draft set of indicators and standards, which will accompany the full management zone descriptions in the Draft General Management Plan / Environmental Impact Statement. The National Park Service hopes that you will review the draft indicators and standards presented in the draft document.

The last steps of visitor capacity decision making, which continue indefinitely, are monitoring the park's indicators and standards and taking management actions to minimize impacts when needed. Once the indicators and standards Environmental Impact Statement, they generally will not change. However, as monitoring of the park's conditions continues, park managers may decide to modify, add, or delete indicators if better ways are found to measure changes in resource and social conditions. The results of the park's monitoring efforts, related visitor use management actions, and any changes to the park's indicators and standards will be available for public review.

#### WHAT'S NEXT?

The next step is to send us your comments. We need to know the reasons for your likes and dislikes. We encourage all ideas. Each comment is considered on its own merits. Public comment analysis is not a voting process. Please take time to fill out the enclosed comment form and return it by July 8th, 2005. We will consider your comments when we develop the NPS preferred alternative and the Draft General Management Plan, which will include an analysis of the environmental consequences of implementing each of the alternatives.

Please be aware that due to public disclosure requirements, the National Park Service, if requested, is required to make the names and addresses of commentors public. However, individual respondents may request that we withhold their name and address from the public record, which we will honor to the extent allowable by law. If you wish to withhold your name and or/address from the public record, please check the appropriate box on the comment form provided.

Denver Service Center – Mary McVeigh, PD 12795 West Alameda Parkway PO Box 25287 Denver CO 80225-0287

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE \$300









#### YOU'RE INVITED . . .

Please attend one of the open house meetings. STOP IN AT ANY TIME. We look forward to discussing the alternatives and answering your questions.

#### Monday, June 6th

3 – 7 p.m.

Pima Community College, Downtown Amethyst Community Room, Room CC180 1255 N. Stone Ave Tucson, AZ

#### Tuesday, June 7th

3 – 7 p.m.

Sunnyside High School Auditorium 1725 E. Bilby Road Tucson, AZ

#### Wednesday, June 8th

3 – 7 p.m.

Picture Rocks Intermediate School Cafeteria 5875 N. Sanders Tucson, AZ

#### Thursday, June 9th

4:30 – 7 p.m.

Pima Community College — East Community Room 8181 E. Irvington Tucson, AZ

## SCHEDULE

STEP	PLANNING ACTIVITY	PUBLIC INVOLVEMENT OPPORTUNITY
1	<b>Project Startup</b> . Assemble planning team, determine the scope of the project, design the process for carrying out the project, determine issues and concerns, and gather and analyze information.  January 2003 through February 2003	Completed
2	Identify the Planning Context. Reaffirm the purpose, significance, mission, mission goals, and primary interpretive themes for the park and continue to gather and analyze information.  April 2003 through July 2003	Read newsletter #1, send us your comments, and attend public meetings. Completed
3	Present Research Findings to the Public. Data was gathered from the transportation study, visitor use survey, soundscape study, and geographic information system mapping and presented to the public.  March 2005	Read newsletter #2, and attend public meetings.  Completed
4	<b>Develop and Evaluate Alternatives</b> . We are currently at this step. Develop a reasonable range of alternative futures for the park. Select the NPS preferred alternative.  March 2005 through September 2005	Read newsletter #3, send us your comments, and attend public meetings.
5	Prepare and Publish the Draft General Management Plan / Environmental Impact Statement.  The Draft General Management Plan / Environmental Impact Statement (GMP/EIS) will be prepared and distributed for public review. The draft document will describe the planning context, management alternatives, and impacts.  October 2005 to June 2006	Read draft GMP/EIS, send us your comments, and attend public meetings.
6	Revise and Publish the Final General Management Plan / Environmental Impact Statement.  Appropriate changes will be made to the draft document based on public comments, environmental analysis, and other information. The final GMP/EIS will be distributed. The Record of Decision will be signed.  July 2006 to December 2006	Read final GMP/EIS.

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